The guidance outlined below is based on a procedure followed by the State of New Mexico when flushing irrigation ditches under their authority. The following assumptions apply:

1. If the headgates were closed appropriately and the ditches are dry then there may not be potentially contaminated soils within the ditch.
2. If the headgates remained open or were not completely closed then potentially contaminated water/sediments may have entered and contaminated sediments may be visually present.

Prior to flushing irrigation ditches, in an area proximate to the river, soil or sediment samples should be collected from portions of the ditch that appear to have been impacted by the release. A corresponding background soil or sediment sample should be collected from a ditch portion further upstream (as far as a mile if necessary) which appears to not be impacted. Soil/Sediment samples should be collected from (0-2") below ground surface (bgs) using a disposable plastic sampling scoop. Soil/Sediment samples should be placed into a disposable aluminum pan for homogenization and then placed into a pre-cleaned, laboratory supplied 8-ounce (oz.) glass jar and submitted to an accredited laboratory for total metals analysis via EPA method 6010C/6020A and mercury via EPA method 7471A on a rush turn around time.

Following soil/sediment sampling, in order to prevent migration of potentially contaminated soil/sediments into the distribution system the side gates should be completely closed to prevent migration to fields. Then the headgate should be opened to allow flushing of the ditch. Based on results from a previous investigation conducted by the State, it is recommended that flushing be conducted for 12-24 hours. Flushing is preferable because irrigation ditch excavation could take several weeks to complete satisfactorily.

Following flushing of the ditch, the headgate can remain open and the ditch can be filled. The State of New Mexico team did not collect post-flushing surface water samples, however, should local authorities wish to confirm adequate flushing then surface water samples may be collected.

Surface water should be collected into appropriate pre-cleaned laboratory supplied sample bottles directly from the water. The sample container should point upstream to avoid disturbing the substrate. Samples should be submitted to an accredited laboratory for Total and Dissolved Target Analyte List (TAL) metals including Al, Ca, Fe, K, Mg, Na, SB, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn, Mo, Ni, Se, Tl, V, Zn and Hg via EPA method 200.7, 200.8, and 245.1. The sample for dissolved metals should be field filtered with a 45 micron filter and a peristaltic pump or laboratory filtration. Additionally, the samples could be analyzed for Hardness by SM23240B, TSS by SM2540D, TDS by SM2540C, alkalinity by SM2320B, and pH by SM4500H+B.

A final visual observation should be conducted by appropriate local authorities.